

Appl. No. 09/916,885
Amtd. dated Sept. 2, 2004
Reply to Office Action of March 19, 2004

OK to file
9/2/04

Amendments to the Claims:

Please cancel claims 15-61.

1. ^{presented} (Previously amended) A process for preparing modafinil comprising the steps of:

- oxidizing 2-[(diphenylmethyl)thio]acetamide in a mixture comprising H₂O₂, a mineral acid, and either an alcohol or phase transfer catalyst,
- precipitating a solid containing modafinil from the mixture, and
- separating the mixture from the precipitated solid.

2. (Original) The process of claim 1 further comprising isolating modafinil in purity greater than or equal to 99.5% from the precipitated solid by a single crystallization.

3. (Original) The process of claim 2 wherein the modafinil is isolated in purity greater than or equal to 99.9% from the precipitated solid by a single crystallization.

4. (Original) The process of claim 1 wherein the modafinil is isolated in pharmaceutically acceptable purity.

5. (Original) The process of claim 1 wherein the purity of the modafinil is measured by the relative area of peaks in a chromatogram obtained by ultraviolet detection using 225 nm wavelength light.

6. (Original) The process of claim 1 wherein the precipitated solid is modafinil in greater than or equal to 99 % purity.

7. (Original) The process of claim 6 wherein the precipitated solid is modafinil in greater than or equal to 99.5 % purity.

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8. (Original) The process of claim 1 wherein the H₂O₂ is added to the mixture as a 10-50 weight percent solution in water.

9. (Original) The process of claim 1 wherein the mineral acid is selected from the group consisting of sulfuric acid, perchloric acid, and phosphoric acid.

10. (Original) The process of claim 1 wherein the alcohol is selected from the group consisting of isopropanol, *tert*-butanol, and 2-methyl-1-butanol.

11. (Original) The process of claim 1 wherein the mixture further includes an inert liquid organic medium.

12. (Original) The process of claim 11 wherein the inert liquid organic medium is selected from the group consisting of methanol, ethanol, ethylene glycol, acetone, dimethylcarbonate, and mixtures thereof.

13. (Original) The process of claim 11 wherein the oxidizing comprises suspending one equivalent of the 2-[(diphenylmethyl)thio]acetamide in an inert liquid organic medium in an amount of 0.07 to about 0.13 grams per milliter, adding from about 0.05 to about 0.2 molar equivalents of the mineral acid, from about 2 to about 4 equivalents of the alcohol and from about 1.5 to about 4 molar equivalents of H₂O₂ to the liquid organic medium.

14. (Original) The process of claim 13 wherein oxidizing further comprises heating the inert liquid organic medium.

15-61. (Cancel)

presented

62. (Previously added) The process of claim 1, wherein the mineral acid is present in a catalytic amount with respect to the 2-[(diphenylmethyl)thio]acetamide.

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Presented

63. (Previously added) The process of claim 1, wherein the catalytic amount is from about 0.02 to about 0.2 molar equivalents of mineral acid.

presented

64. (Previously added) The process of claim 2, wherein the single crystallization is a crystallization from acetone.